NTSB Report #: Rec #: A-14-047,a-14-048,a-14-049,a-14-050,a-14-051,a-14-058,a-14-059,a-14-060,a-14-061,a-14-062,a-14-063,a-12-058,a-12-061,a-11-043,a-09-135,a-09-136,a-09-137,a-09-138,a-08-100,a-07-101,a-07-106,a-07-110,a-11-042,a-05-017,a-05-018,a-01-062,a-01-063,a-01-064,a-01-065,a-01-066,a-01-067,a-00-019,a-00-020,a-07-051,a-10-001,a-10-0

Notation Id 6952B 2 Accident Date: 08/06/97 Issue Date: 01/27/00

City/State: NIMITZ HILL, GU NTSB Report #: AAR-00-01 Most Wanted List:

ON 8/6/97, ABOUT 0142:26 GUAM LOCAL TIME, KOREAN AIR FLIGHT 801, A BOEING 747-3B5B (747-300), KOREAN REGISTRATION HL7468, OPERATED BY KOREAN AIR COMPANY, LTD., CRASHED AT NIMITZ HILL, GUAM. FLIGHT 801 DEPARTED FROM KIMPO INTERNATIONAL AIRPORT, SEOUL, KOREA, WITH 2 PILOTS, 1 FLIGHT ENGINEER, 14 FLIGHT ATTENDANTS, AND 237 PASSENGERS ON BOARD. THE AIRPLANE HAD BEEN CLEARED TO LAND ON RUNWAY 6L AT A.B. WON GUAM INTERNATIONAL AIRPORT, AGANA, GUAM, AND CRASHED INTO HIGH TERRAIN ABOUT 3 MILES SOUTHWEST OF THE AIRPORT. OF THE 254 PERSONS ON BOARD, 228 WERE KILLED, AND 23 PASSENGERS AND 3 FLIGHT ATTENDANTS SURVIVED THE ACCIDENT WITH SERIOUS INJURIES. THE AIRPLANE WAS DESTROYED BY IMPACT FORCES AND A POSTCRASH FIRE. FLIGHT 801 WAS OPERATING IN U.S. AIRSPACE AS A REGULARLY SCHEDULED INTERNATIONAL PASSENGER SERVICE FLIGHT UNDER THE CONVENTION ON INTERNATIONAL CIVIL AVIATION AND THE PROVISIONS OF 14 CODE OF FEDERAL REGULATIONS PART 129 AND WAS ON AN INSTRUMENT FLIGHT RULES FLIGHT PLAN.

Recommendation #: A-00-019 Overall Status: Closed - Acceptable Action Priority: CLASS II

THE NTSB RECOMMEND THAT THE GOVERNOR OF THE TERRITORY OF GUAM: FORM, WITHIN 90 DAYS, A TASK FORCE COMPRISING REPRESENTIVES FROM ALL EMERGENCY RESPONSE AGENCIES ON THE ISLAND, INCLUDING THE APPROPRIATE DEPARTMENTS WITHIN THE GOVERNMENT OF GUAM, FEDERAL AVIATION ADMINISTRATION, GUAM INTERNATIONAL AIRPORT AUTHORITY, U.S. NAVY, U.S. AIR FORCE, U.S. COAST GUARD, FEDERAL EMERGENCY MANAGEMENT AGENCY, AND ALL OTHER AFFECTED AGENCIES, TO DEFINE AND COORDINATE EMERGENCY NOTIFICATION AND RESPONSE PROCEDURES TO ENSURE THAT TIMELY EMERGENCY NOTIFICATIONS ARE MADE TO ALL LOCAL AND FEDERAL AGENCIES ACCORDING TO NEED, LOCATION, AND RESPONSE TIME CAPABILITY.

of Addressees: 1 Overall Date Closed: 05/17/02

Addressee: Territory of Guam Closed - Acceptable Action Date Closed: 05/17/02

Recommendation #: A-00-020 Overall Status: Closed - Acceptable Action Priority: CLASS II

THE NTSB RECOMMEND THAT THE GOVERNOR OF THE TERRITORY OF GUAM: REQUIRE PERIODIC AND REGULARLY SCHEDULED INTERAGENCY DISASTER RESPONSE EXCERCISES, INCLUDING AN OFF-AIRPORT AIRCRAFT ACCIDENT SCENARIO, IN ADDITION TO THOSE RESPONSE DRILLS ALREADY REQUIRED AT GUAM INTERNATIONAL AIRPORT IN ACCORDANCE WITH 14 CODE OF FEDERAL REGULATIONS SECTION 139.325.

of Addressees: 1 Overall Date Closed: 05/17/02

Addressee: Territory of Guam Closed - Acceptable Action Date Closed: 05/17/02

Notation Id 7195A 1 Accident Date: 06/01/99 Issue Date: 12/10/01

City/State: Little Rock, AR NTSB Report #: AAR-01-02 Most Wanted List:

On June 1, 1999, at 2350:44 central daylight time, American Airlines flight 1420, a McDonnell Douglas DC-9-82 (MD-82), N215AA, crashed after it overran the end of runway 4R during landing at Little Rock National Airport in Little Rock, Arkansas. Flight 1420 departed from Dallas/Fort Worth International Airport, Texas, about 2240 with 2 flight crewmembers, 4 flight attendants, and 139 passengers aboard and touched down in Little Rock at 2350:20. After departing the end of the runway, the airplane struck several tubes extending outward from the left edge of the instrument landing system localizer array, located 411 feet beyond the end of the runway; passed through a chain link security fence and over a rock embankment to a flood plain, located approximately 15 feet below the runway elevation; and collided with the structure supporting the runway 22L approach lighting system. The captain and 10 passengers were killed; the first officer, the flight attendants, and 105 passengers received serious or minor injuries; and 24 passengers were not injured. The airplane was destroyed by impact forces and a postcrash fire. Flight 1420 was operating under the provisions of 14 Code of Federal Regulations (CFR) Part 121 on an instrument flight rules (IFR) flight plan.

Recommendation #: A-01-062 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Issue a mandatory briefing item to tower controllers that describes the circumstances of this accident, including the interactions between the controller and Aircraft Rescue and Fire Fighting (ARFF) crews. This briefing item should emphasize that location information provided to ARFF crews should be as complete and specific as possible to minimize opportunities for confusion.

of Addressees: 1 Overall Date Closed: 11/22/02

Addressee: FAA Closed - Acceptable Action Date Closed: 11/22/02

Recommendation #: A-01-063 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Amend Federal Aviation Administration Order 7110.65, "Air Traffic Control," to require controllers to monitor the progress of Aircraft Rescue and Fire Fighting crews responding to emergencies to ensure that the response is consistent with known location information.

of Addressees: 1 Overall Date Closed: 08/10/04

Addressee: FAA Closed - Acceptable Action Date Closed: 08/10/04

Recommendation #: A-01-064 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Amend Federal Aviation Administration (FAA) Order 7210.3R, "Facility Operation and Administration," to direct tower managers to establish mutual annual briefings between air traffic control (ATC) and Aircraft Rescue and Fire Fighting (ARFF) personnel to ensure that these personnel have a common understanding of the local airport emergency plan and sections of the FAA's Advisory Circular 150/5210-7C, "Aircraft Rescue and Firefighting Communications," that are applicable to local ATC/ARFF emergency response procedures.

of Addressees: 1 Overall Date Closed: 01/30/04

Addressee: FAA Closed - Acceptable Action Date Closed: 01/30/04

Recommendation #: A-01-065 Overall Status: Closed - Unacceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Amend 14 Code of Federal Regulations 139.319(j) to require a minimum Aircraft Rescue and Fire Fighting staffing level that would allow exterior firefighting and rapid entry into an airplane to perform interior firefighting and rescue of passengers and crewmembers.

of Addressees: 1 Overall Date Closed: 10/28/11

Closed -

Addressee: FAA Unacceptable Date Closed: 10/28/11
Action

Recommendation #: A-01-066 Overall Status: Closed - Unacceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Evaluate crash detection and location technologies, select the most promising candidate(s) for ensuring that emergency responders could expeditiously arrive at an accident scene, and implement a requirement to install and use the equipment.

of Addressees: 1 Overall Date Closed: 10/28/11

Addressee: FAA Closed - Unacceptable Date Closed: 10/28/11
Action

Recommendation #: A-01-067 Overall Status: Closed - Acceptable Alternate Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Develop specific criteria, using the Federal Railroad Administration's requirements as guidance, to be evaluated during a postaccident interagency emergency response critique, and amend 14 Code of Federal Regulations Part 139 to require airport operators to conduct this critique within 60 days after any air carrier accident and provide the results of the critique to the Federal Aviation Administration.

of Addressees: 1 Overall Date Closed: 10/28/11

Addressee: FAA Acceptable Date Closed: 10/28/11

Alternate Action

Notation Id 7632A Accident Date: 12/18/03 Issue Date: 05/31/05

City/State: Memphis, TN NTSB Report #: AAR-05-01 Most Wanted List:

On December 18, 2003, about 1226 central standard time, Federal Express Corporation (FedEx) flight 647, a Boeing MD-10-10F (MD-10),1 N364FE, crashed while landing at Memphis International Airport (MEM), Memphis, Tennessee. The right main landing gear collapsed after touchdown on runway 36R, and the airplane veered off the right side of the runway. After the gear collapsed, a fire developed on the right side of the airplane. Of the two flight crewmembers and five nonrevenue FedEx pilots2 on board the airplane, the first officer and one nonrevenue

pilot received minor injuries during the evacuation. The postcrash fire destroyed the airplane's right wing and portions of the right side of the fuselage. Flight 647 departed from Metropolitan Oakland International Airport, Oakland, California, about 0832 (0632 Pacific standard time) and was operating under the provisions of 14 Code of Federal Regulations (CFR) Part 121 on an instrument flight rules flight plan.

Recommendation #: A-05-017 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Inform all air traffic control tower controllers of the circumstances of this accident, including the need to ensure that aircraft rescue and firefighting (ARFF) vehicles are not delayed without good cause when en route to an emergency and the need to relay the number of airplane occupants to ARFF responders.

of Addressees: 1 Overall Date Closed: 03/29/06

Addressee: FAA Closed - Acceptable Action Date Closed: 03/29/06

Recommendation #: A-05-018 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: In cooperation with the Memphis/Shelby County Airport Authority and Memphis Fire Department, modify the November 1, 2001, letter of agreement, titled, Airport Emergency .Procedures, to fully describe the protocol to be used for emergency responses, including Rural/Metro Fire Department aircraft rescue and firefighting equipment and personnel.

of Addressees: 1 Overall Date Closed: 03/29/06

Addressee: FAA Closed - Acceptable Action Date Closed: 03/29/06

Notation Id 7915 Accident Date: 03/02/03 Issue Date: 09/04/07

City/State: Monterey, MA NTSB Report #: Most Wanted No

List:

On March 2, 2003, about 2009 eastern standard time, a Piper PA-32-300, N4072R, was destroyed when it collided with terrain in Monterey, Massachusetts. The certified private pilot and three passengers were fatally injured, and three passengers sustained serious injuries. Instrument meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan was filed for the flight from Siler City Municipal Airport, Siler City, North Carolina, to the Dillant-Hopkins Airport (EEN), Keene, New Hampshire. The personal flight was conducted under 14 Code of Federal Regulations (CFR) Part 91. Although the airplane's Technical Standard Order (TSO)-C91 121.5-megahertz (Mhz) ELT functioned after impact, the airplane wreckage and survivors were not located until about 1226 on March 3, 2003, more than 16 hours after the accident.

Recommendation #: A-07-051 Overall Status: Closed - Unacceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Seek authority from Congress to require the installation of Technical Standard Order C126 [406 megahertz (MHz)] emergency locator transmitters (ELTs) in all applicable aircraft at the earliest possible opportunity. Further, the Federal Aviation Administration should strongly consider establishing a compliance date for upgrading to 406-MHz ELTs on or before the date that COSPAS-SARSAT will cease satellite processing of 121.5-MHz signals.

of Addressees: 1 Overall Date Closed: 07/08/13

Addressee: FAA Closed - Unacceptable Date Closed: 07/08/13
Action

Notation Id 7772C_1 Accident Date: 02/07/06 Issue Date: 12/17/07

City/State: Philadelphia, PA NTSB Report #: AAR-07-07 Most Wanted List:

On February 7, 2006, about 2359 eastern standard time, United Parcel Service Company (UPS) flight 1307, a McDonnell Douglas DC-8-71F, N748UP, landed at its destination airport, Philadelphia International Airport (PHL), Philadelphia, Pennsylvania, after a cargo smoke indication in the cockpit. The captain, first officer, and flight engineer evacuated the airplane after landing. The flight crewmembers sustained minor injuries, and the airplane and most of the cargo were destroyed by fire after landing. The scheduled cargo flight was operating under the

provisions of 14 Code of Federal Regulations (CFR) Part 121 on an instrument flight rules flight plan. Night visual conditions prevailed at the time of the accident.

Recommendation #: A-07-101 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Require airport inspectors to ensure that Part 139 airports with cargo operations include cargo aircraft in their aircraft rescue and firefighting aircraft familiarization training programs.

of Addressees: 1 Overall Date Closed: 10/12/11

Addressee: FAA Closed - Acceptable Action Date Closed: 10/12/11

Accident Date: Notation Id 7772C 2 02/07/06 **Issue Date:** 12/17/07

Most Wanted City/State: Philadelphia, PA NTSB Report #: AAR-07-07

List:

No

On February 7, 2006, about 2359 eastern standard time, United Parcel Service Company (UPS) flight 1307, a McDonnell Douglas DC-8-71F, N748UP, landed at its destination airport, Philadelphia International Airport (PHL), Philadelphia, Pennsylvania, after a cargo smoke indication in the cockpit. The captain, first officer, and flight engineer evacuated the airplane after landing. The flight crewmembers sustained minor injuries, and the airplane and most of the cargo were destroyed by fire after landing. The scheduled cargo flight was operating under the

provisions of 14 Code of Federal Regulations (CFR) Part 121 on an instrument flight rules flight plan. Night visual conditions prevailed at the time of the accident.

Recommendation #: A-07-106 Overall Status: Closed - Acceptable Action **Priority:** CLASS II

TO THE PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION: Require aircraft operators that transport hazardous materials to immediately provide consolidated and specific information about hazardous materials on board an aircraft, including proper shipping name, hazard class, quantity, number of packages, and location, to on-scene emergency responders upon notification of an accident or incident.

of Addressees: **Overall Date Closed:** 07/21/10

Closed -Addressee: **PHMSA** Date Closed: 07/21/10 Acceptable Action

Notation Id 7772C_3 Accident Date: 02/07/06 Issue Date: 12/17/07

City/State: Philadelphia, PA NTSB Report #: AAR-07-07 Most Wanted List:

On February 7, 2006, about 2359 eastern standard time, United Parcel Service Company (UPS) flight 1307, a McDonnell Douglas DC-8-71F, N748UP, landed at its destination airport, Philadelphia International Airport (PHL), Philadelphia, Pennsylvania, after a cargo smoke indication in the cockpit. The captain, first officer, and flight engineer evacuated the airplane after landing. The flight crewmembers sustained minor injuries, and the airplane and most of the cargo were destroyed by fire after landing. The scheduled cargo flight was operating under the

provisions of 14 Code of Federal Regulations (CFR) Part 121 on an instrument flight rules flight plan. Night visual conditions prevailed at the time of the accident.

Recommendation #: A-07-110 Overall Status: Closed - Exceeds Recommended Action Priority: CLASS II

TO THE CARGO AIRLINE ASSOCIATION: Work with your member airlines and other groups, such as the Air Transport Association, major aircraft manufacturers, and the Aircraft Rescue and Firefighting (ARFF) Working Group,4 to develop and disseminate accurate and complete airplane Emergency Response diagrams for ARFF personnel at airports with cargo operations.

of Addressees: 1 Overall Date Closed: 12/27/10

Addressee: Cargo Airline Association Closed - Exceeds Recommended Date Closed: 12/27/10

Action

Notation Id 8067A 5 Accident Date: 09/27/09 Issue Date: 11/13/09

City/State: District Heights, MD NTSB Report #: AAR-09-07 Most Wanted List:

On September 27, 2008, about 2358 eastern daylight time, an Aerospatiale (Eurocopter) SA365N1, N92MD, call sign Trooper 2, registered to and operated by the MSP as a public medical evacuation (medevac) flight, impacted terrain about 3.2 miles north of the runway 19R threshold at Andrews Air Force Base (ADW), Camp Springs, Maryland, during an instrument landing system (ILS) approach. The commercial pilot, one flight paramedic, one field provider, and one of two automobile accident patients being transported were killed. The other patient being transported survived with serious injuries from the helicopter accident and was taken to a local hospital. The helicopter was substantially damaged when it collided with trees and terrain in Walker Mill Regional Park, District Heights, Maryland. The flight originated from a landing zone at Wade Elementary School, Waldorf, Maryland, about 2337, destined for Prince George's Hospital Center (PGH), Cheverly, Maryland. Night visual meteorological conditions prevailed for the departure; however, Trooper 2 encountered instrument meteorological conditions en route to the hospital and diverted to ADW. No flight plan was filed with the FAA, and none was required. The MSP System Communications Center (SYSCOM) was tracking the flight using global positioning system data transmitted with an experimental automatic dependent surveillance-broadcast (ADS-B) communications link.

Recommendation #: A-09-135 Overall Status: Closed - Acceptable Alternate Action Priority: CLASS II

TO THE MARYLAND STATE POLICE: Revise your policy regarding incident commanders to specify that, in any event involving a missing or overdue aircraft, an Aviation Command trooper will serve as the incident commander.

of Addressees: 1 Overall Date Closed: 12/16/11

State of Maryland, Closed
Addressee: State Police, Aviation Acceptable Date Closed: 12/16/11

Command Alternate Action

Recommendation #: A-09-136 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE MARYLAND STATE POLICE: Provide additional training to your dispatchers on the use of cell phone pinging and include instruction about how to integrate the data obtained from cell phone pinging into an overall search and rescue plan.

of Addressees: 1 Overall Date Closed: 12/16/11

State of Maryland,
Addressee: State Police, Aviation Closed - Date Closed: 12/16/11

Command Acceptable Action

Notation Id 8067A 3 Accident Date: 09/27/09 Issue Date: 11/13/09

City/State: District Heights, MD NTSB Report #: AAR-09-07 Most Wanted List:

On September 27, 2008, about 2358 eastern daylight time, an Aerospatiale (Eurocopter) SA365N1, N92MD, call sign Trooper 2, registered to and operated by the MSP as a public medical evacuation (medevac) flight, impacted terrain about 3.2 miles north of the runway 19R threshold at Andrews Air Force Base (ADW), Camp Springs, Maryland, during an instrument landing system (ILS) approach. The commercial pilot, one flight paramedic, one field provider, and one of two automobile accident patients being transported were killed. The other patient being transported survived with serious injuries from the helicopter accident and was taken to a local hospital. The helicopter was substantially damaged when it collided with trees and terrain in Walker Mill Regional Park, District Heights, Maryland. The flight originated from a landing zone at Wade Elementary School, Waldorf, Maryland, about 2337, destined for Prince George's Hospital Center (PGH), Cheverly, Maryland. Night visual meteorological conditions prevailed for the departure; however, Trooper 2 encountered instrument meteorological conditions en route to the hospital and diverted to ADW. No flight plan was filed with the FAA, and none was required. The MSP System Communications Center (SYSCOM) was tracking the flight using global positioning system data transmitted with an experimental automatic dependent surveillance-broadcast (ADS-B) communications link.

Recommendation #: A-09-137 Overall Status: Closed - Reconsidered Priority: CLASS II

TO PRINCE GEORGE'S COUNTY, MARYLAND: Provide additional training to your dispatchers on the use of cell phone pinging and include instruction about how to integrate the data obtained from cell phone pinging into an overall search and rescue plan.

of Addressees: 1 Overall Date Closed: 05/29/13

Addressee:

State of Maryland, Closed Prince George's County Reconsidered

Date Closed: 05/29/13

Notation Id 8067A_4 Accident Date: 09/27/09 Issue Date: 11/13/09

City/State: District Heights, MD NTSB Report #: AAR-09-07 Most Wanted List:

On September 27, 2008, about 2358 eastern daylight time, an Aerospatiale (Eurocopter) SA365N1, N92MD, call sign Trooper 2, registered to and operated by the MSP as a public medical evacuation flight, impacted terrain about 3.2 miles north of the runway 19R threshold at Andrews Air Force Base (ADW), Camp Springs, Maryland, during an instrument landing system (ILS) approach.1 The commercial pilot, one flight paramedic, one field provider, and one of two automobile accident patients being transported were killed. The other patient being transported survived with serious injuries from the helicopter accident and was taken to a local hospital. The helicopter was substantially damaged when it collided with trees and terrain in Walker Mill Regional Park, District Heights, Maryland. The flight originated from a landing zone at Wade Elementary School, Waldorf, Maryland, about 2337, destined for Prince George's Hospital Center, Cheverly, Maryland. Night visual meteorological conditions prevailed for the departure; however, Trooper 2 encountered instrument meteorological conditions en route to the hospital and diverted to ADW. No flight plan was filed with the FAA, and none was required.

Recommendation #:	A-09-138	Overall Status:	Closed - Acceptable Actio	n Priority:	CLASS II
TO THE ASSOCIATION OF PUBLIC SAFETY COMMUNICATIONS OFFICIALS INTERNATIONAL, INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE, INTERNATIONAL ASSOCIATION OF FIRE CHIEFS, NATIONAL ASSOCIATION OF AIR MEDICAL COMMUNICATIONS SPECIALISTS, NATIONAL EMERGENCY NUMBER ASSOCIATION, AND THE NATIONAL SHERIFFS ASSOCIATION: Inform your members through your websites, newsletters, and conferences of the lessons learned from the emergency response to this accident, particularly emphasizing that search and rescue personnel need to understand how to interpret and use both global positioning system coordinates and the results of cell phone pinging.					
# of Addressees:	6		Overall Date Closed:	11/20/15	
Addressee:	Association of Public - Safety Communications Officials International	Closed - Acceptable Action	Date	Closed:	01/11/13
Addressee:	International Association of Chiefs of Police	Closed - Unacceptable Action - No Response Received	Date	Closed:	05/05/11
Addressee:	International Association of Fire Chiefs	Closed - Acceptable Action	Date	Closed:	11/20/15
Addressee:	National Association of Air Medical Communications Specialists	Closed - Acceptable Action	Date	Closed:	07/09/13
Addressee:	National Emergency Number Association	Closed - Unacceptable Action - No Response Received	Date	Closed:	09/24/15
Addressee:	National Sheriffs' Association	Closed - Acceptable Action	Date	Closed:	04/06/15

Notation Id 8166 1 **Accident Date**: 04/26/07 **Issue Date**: 01/29/10

City/State: Dawsonville, GA NTSB Report #: Most Wanted No List:

This letter describes the need for improvements in Federal Aviation Administration (FAA) support of search and rescue (SAR) response to aircraft accidents. The Air Force Rescue Coordination Center (AFRCC) has responsibility for initiation and coordination of SAR activities in the domestic United States. In several recent accidents, information readily available to FAA staff was either not well communicated or not made available to the AFRCC in a timely manner. The information could have significantly expedited the location of downed aircraft and recovery of survivors. The National Transportation Safety Board (NTSB) believes that improvements in information access and delivery could reduce search time and speed the rescue of survivors.

When the AFRCC receives information that a new accident or incident requiring SAR response has occurred, AFRCC personnel assign it an incident number and begin to obtain all available information about the flight. Each significant event or contact during the search is recorded in a chronological mission log. The AFRCC coordinates the activities of the searchers and serves as a clearinghouse for information. It continues to track the mission until the aircraft is located or the search is suspended pending additional information.

Recommendation #: A-10-001 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Develop, in conjunction with the Air Force Rescue Coordination Center, specific phraseology for communicating about the location, time, and nature of emergency locator transmitter signals and emergency beacon codes.

of Addressees: 1 Overall Date Closed: 07/23/15

Addressee: FAA Closed - Acceptable Action Date Closed: 07/23/15

Recommendation #: A-10-002 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Amend Federal Aviation Administration Order 7110.65, Air Traffic Control, to prescribe the use of the phraseology requested in Safety Recommendation A-10-001.

of Addressees: 1 Overall Date Closed: 07/23/15

Addressee: FAA Closed - Acceptable Action Date Closed: 07/23/15

Recommendation #: A-10-003 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Provide training for all Federal Aviation Administration personnel who may be required to interact with the Air Force Rescue Coordination Center (AFRCC), ensuring that personnel understand the AFRCC's incident reporting process and recognize that new incidents are always assigned a unique incident number.

of Addressees: 1 Overall Date Closed: 05/13/13

Addressee: FAA Closed - Acceptable Action Date Closed: 05/13/13

Recommendation #: A-10-004 Overall Status: Closed - Acceptable Alternate Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Require air traffic control facilities to enter all Air Force Rescue Coordination Center (AFRCC) contacts on Federal Aviation Administration Form 7230-4, Daily Record of Facility Operations, and, in circumstances where that contact results in the AFRCC assigning a new incident number to the event, require facilities to contact the AFRCC at least once per shift for a status update until the AFRCC advises that an incident has been resolved.

of Addressees: 1 Overall Date Closed: 08/24/10

Addressee: FAA Acceptable Date Closed: 08/24/10
Alternate Action

Recommendation #: A-10-005 Overall Status: Closed - Unacceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Amend Federal Aviation Administration Order 7110.65, Air Traffic Control, to require that, when radar or other location data are available to air traffic controllers that indicate to a reasonable likelihood the location of a downed aircraft, the information be immediately provided to appropriate local first responders and the Air Force Rescue Coordination Center.

of Addressees: 1 Overall Date Closed: 07/23/15

Addressee: FAA Closed - Unacceptable Date Closed: 07/23/15
Action

Recommendation #: A-10-006 Overall Status: Closed - Unacceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Establish and staff a technical assistance group charged with providing immediate assistance at all times to air traffic control (ATC) facilities and search and rescue (SAR) providers in any SAR situation. Such a group should be 1) able to identify all Federal Aviation Administration (FAA) resources that may be able to provide information useful for SAR purposes; 2) familiar with the different types of ATC facilities; 3) able to identify all radar sites providing coverage in the area of interest; 4) familiar with the data recording capabilities of those facilities and the use of appropriate data extraction tools; 5) provided with network access as necessary to remotely retrieve SAR-related data; 6) able to analyze, organize, deliver, and explain FAA data to SAR providers; and 7) authorized to require support from local facilities to provide data that are not remotely accessible, including directing the use of overtime and after-hours staff support if necessary to support a SAR activity. At least one member of this group should be available 24 hours a day, every day, on a rotating basis, to initiate SAR assistance.

of Addressees: 1 Overall Date Closed: 07/23/15

Addressee: FAA Unacceptable Date Closed: 07/23/15
Action

Recommendation #: A-10-007 Overall Status: Closed - Unacceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Amend Federal Aviation Administration Orders 7110.65, Air Traffic Control, and 8020.16, Air Traffic Organization Aircraft Accident and Incident Notification, Investigation, and Reporting, to require any air traffic control facility that becomes aware of a possible need for search and rescue to immediately notify the technical assistance group created pursuant to Safety Recommendation A-10-6 and make all relevant data available for its

of Addressees: 1 Overall Date Closed: 07/23/15

Addressee: FAA Closed - Unacceptable Date Closed: 07/23/15
Action

Recommendation #: A-10-008 Overall Status: Open - Acceptable Response Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Provide to all air traffic control (ATC) facilities software, and appropriate training in its use, that will permit nontechnical ATC operational personnel to immediately access latitude, longitude, and altitude data related to, at a minimum, the final 2 minutes of flight for aircraft operating on a specified transponder code.

of Addressees: 1 Overall Date Closed: N/A

Addressee: FAA Open - Acceptable Response Date Closed: N/A

Recommendation #: A-10-009 Overall Status: Open - Acceptable Response Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Establish procedures for identifying aircraft equipped with automatic dependent surveillance broadcast (ADS-B) capabilities to personnel responsible for search and rescue (SAR) and to the technical assistance group created pursuant to Safety Recommendation A-10-6 for providing expeditious access to ADS-B location data when needed to support SAR activities.

of Addressees: 1 Overall Date Closed: N/A

Addressee: FAA Open - Acceptable Response Date Closed: N/A

Notation Id 8093A Accident Date: 01/27/09 Issue Date: 05/19/11

City/State: Lubbock, TX NTSB Report #: AAR-11-02 Most Wanted List: No

On January 27, 2009, about 0437 central standard time, an Avions de Transport Régional (ATR) Aerospatiale Alenia ATR 42-320 (ATR 42), N902FX, operating as Empire Airlines flight 8284, was on an instrument approach when it crashed short of the runway at Lubbock Preston Smith International Airport (LBB), Lubbock, Texas.2 The captain sustained serious injuries, and the first officer sustained minor injuries. The airplane was substantially damaged. The airplane was registered to FedEx Corporation and operated by Empire Airlines, Inc., as a 14 Code of Federal Regulations (CFR) Part 121 supplemental cargo flight. The flight departed from Fort Worth Alliance Airport, Fort Worth, Texas, about 0313. Instrument meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan was filed.

The National Transportation Safety Board (NTSB) determined that the probable cause of this accident was the flight crew's failure to monitor and maintain a minimum safe airspeed while executing an instrument approach in icing conditions, which resulted in an aerodynamic stall at low altitude. Contributing to the accident were (1) the flight crew's failure to follow published standard operating procedures (SOP) in response to a flap anomaly, (2) the captain's decision to continue with the unstabilized approach, (3) the flight crew's poor crew resource management (CRM), and (4) fatigue due to the time of day in which the accident occurred and a cumulative sleep debt, which likely impaired the captain's performance.

Recommendation #: A-11-042 Overall Status: Open - Unacceptable Response Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Develop a method to quickly communicate information regarding the number of persons on board and the presence of hazardous materials to emergency responders when airport emergency response or search and rescue is activated.

of Addressees: 1 Overall Date Closed: N/A

Addressee: FAA Unacceptable Date Closed: N/A Response

Recommendation #: A-11-043 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Amend Advisory Circular 150/5200-30C to include guidance on monitoring and ensuring the operability of emergency response and mutual aid gates during winter operations.

of Addressees: 1 Overall Date Closed: 07/18/12

Addressee: FAA Closed - Acceptable Action Date Closed: 07/18/12

Notation Id 8439 Accident Date: 04/02/11 Issue Date: 10/23/12

City/State: Roswell, NM NTSB Report #: AAR-12-02 Most Wanted List:

On April 2, 2011, about 0934 mountain daylight time, an experimental Gulfstream Aerospace Corporation GVI (G650), N652GD, crashed during takeoff from runway 21 at Roswell International Air Center, Roswell, New Mexico. The two pilots and the two flight test engineers were fatally injured, and the airplane was substantially damaged by impact forces and a postcrash fire. The airplane was registered to and operated by Gulfstream as part of its G650 flight test program. The flight was conducted under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed at the time of the accident.

Recommendation #: A-12-058 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Inform 14 Code of Federal Regulations Part 139 airports that currently have (or may have in the future) flight test activity of the importance of advance coordination of high-risk flight tests with flight test operators to ensure that adequate aircraft rescue and firefighting resources are available to provide increased readiness during known high-risk flight tests.

of Addressees: 1 Overall Date Closed: 07/16/13

Addressee: FAA Closed - Acceptable Action Date Closed: 07/16/13

Recommendation #: A-12-061 Overall Status: Open - Acceptable Response Priority: CLASS II

TO THE FLIGHT TEST SAFETY COMMITTEE: Encourage members to provide notice of and coordinate high-risk flight tests with airport operations and aircraft rescue and firefighting personnel.

of Addressees: 1 Overall Date Closed: N/A

Addressee: Flight Test Safety Open - Acceptable Committee Response Date Closed: N/A

Notation Id 8518A Accident Date: 07/06/13 Issue Date: 07/16/14

City/State: San Francisco, CA NTSB Report #: AAR-14-01 Most Wanted List:

This report discusses the July 6, 2013, accident involving a Boeing 777-200ER, Korean registration HL7742, operating as Asiana Airlines flight 214, which was on approach to runway 28L when it struck a seawall at San Francisco International Airport (SFO), San Francisco, California. Three of the 291 passengers were fatally injured; 40 passengers, 8 of the 12 flight attendants, and 1 of the 4 flight crewmembers received serious injuries. The other 248 passengers, 4 flight attendants, and 3 flight crewmembers received minor injuries or were not injured. The airplane was destroyed.

Safety issues relate to the need for Asiana pilots to adhere to standard operating procedures regarding callouts; reduced design complexity and enhanced training on the airplane's autoflight system; opportunity at Asiana for new instructors to supervise trainee pilots in operational service during instructor training; guidance for Asiana pilots on use of flight directors during a visual approach; more manual flight for Asiana pilots; a context-dependent low energy alert; research that examines the injury potential from significant lateral forces in airplane crashes and the mechanism that produces high thoracic spinal injuries; evaluation of the adequacy of slide/raft inertia load certification testing; aircraft rescue and firefighting (ARFF) training for officers in command of an aircraft accident response; guidance on when to use a skin-piercing nozzle on a burning airplane fuselage; integration of the medical supply buses at SFO into the airport's preparation drills; guidance or protocols for ensuring the safety of passengers and crew at risk of a vehicle strike during ARFF operations; requirements for ARFF staffing; improvements in SFO emergency communications; and increased Federal Aviation Administration (FAA) oversight of SFO's emergency procedures manual. Safety recommendations are addressed to the FAA, Asiana Airlines, Boeing, the ARFF Working Group, and the City of San Francisco.

Recommendation #: A-14-047 Overall Status: Open - Acceptable Response Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Work with the Aircraft Rescue and Firefighting Working Group and equipment manufacturers to develop and distribute more specific policies and guidance about when, how, and where to use the high-reach extendable turret's unique capabilities.

of Addressees: 1 Overall Date Closed: N/A

Addressee: FAA Open - Acceptable Response Date Closed: N/A

Recommendation #: A-14-048 Overall Status: Open - Unacceptable Response Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Once the minimum staffing level has been developed by the Aircraft Rescue and Firefighting (ARFF) Working Group, as requested in Safety Recommendation A-14-60, amend 14 Code of Federal Regulations 139.319(j) to require a minimum ARFF staffing level that would allow exterior firefighting and rapid entry into an airplane to perform interior firefighting and rescue of passengers and crewmembers.

of Addressees: 1 Overall Date Closed: N/A

Addressee: FAA Unacceptable Date Closed: N/A Response

Recommendation #: A-14-049 Overall Status: Open - Acceptable Response Priority: CLASS II

TO THE FEDERAL AVIATION ADMINISTRATION: Work with the Aircraft Rescue and Firefighting (ARFF) Working Group to develop and distribute policy guidance and training materials to ensure that all airport and mutual aid firefighting officers placed in command at the scene of an aircraft accident have at least a minimum level of ARFF training.

of Addressees: 1 Overall Date Closed: N/A

Addressee: FAA Open - Acceptable Response Date Closed: N/A

Open - Acceptable **Priority:** Recommendation #: A-14-050 **Overall Status:** CLASS II Response

TO THE FEDERAL AVIATION ADMINISTRATION: Issue a CertAlert to all Part 139 airports to distribute the information contained in the Federal Aviation Administration's (FAA) legal interpretation of 14 Code of Federal Regulations 139.319 that requires all personnel assigned to aircraft rescue and firefighting duties to meet the initial and recurrent training and live-fire drill requirements and clarify how the FAA will enforce this regulation.

of Addressees: **Overall Date Closed:** N/A

Open - Acceptable FAA Addressee: Date Closed: N/A Response

Open - Unacceptable Recommendation #: CLASS II A-14-051 **Overall Status: Priority:** Response

TO THE FEDERAL AVIATION ADMINISTRATION: Conduct a special inspection of San Francisco International Airport's emergency procedures manual and work closely with the airport to ensure that the airport meets its obligations under Part 139.325.

of Addressees: **Overall Date Closed:** N/A

Open -FAA **Date Closed:** Addressee: Unacceptable N/A Response

Open - Acceptable Recommendation #: A-14-058 **Overall Status: Priority:** CLASS II Response

TO THE AIRCRAFT RESCUE AND FIREFIGHTING WORKING GROUP: Work with the Federal Aviation Administration and equipment manufacturers to develop and distribute more specific policies and guidance about when, how, and where to use the high-reach extendable turret's unique capabilities.

of Addressees: **Overall Date Closed:** N/A

Aircraft Rescue & Fire Open - Acceptable Addressee: **Date Closed:** N/A Fighting Working Group Response

Open - Acceptable Recommendation #: A-14-059 Overall Status: **Priority:** CLASS II Response

TO THE AIRCRAFT RESCUE AND FIREFIGHTING WORKING GROUP: Work with medical and medicolegal professional organizations to develop and distribute guidance on task prioritization for responding aircraft rescue and firefighting (ARFF) personnel that includes recommended best practices to avoid striking or rolling over seriously injured or deceased persons with ARFF vehicles in a mass casualty situation.

of Addressees: Overall Date Closed: N/A

Aircraft Rescue & Fire Open - Acceptable **Date Closed:** N/A Addressee: Fighting Working Group Response

Open - Acceptable Recommendation #: A-14-060 **Overall Status: Priority:** CLASS II Response

TO THE AIRCRAFT RESCUE AND FIREFIGHTING WORKING GROUP: Develop a minimum aircraft rescue and firefighting staffing level that would allow exterior firefighting and rapid entry into an airplane to perform interior firefighting and rescue of passengers and crewmembers.

of Addressees: **Overall Date Closed:** N/A

Aircraft Rescue & Fire

Open - Acceptable Addressee: Date Closed: N/A Fighting Working Group Response

Recommendation #: A-14-061 Overall Status: Open - Acceptable Response Priority: CLASS II

TO THE AIRCRAFT RESCUE AND FIREFIGHTING WORKING GROUP: Develop and distribute, in conjunction with the Federal Aviation Administration, guidance and training materials to ensure that all airport and mutual aid firefighting officers placed in command at the scene of an aircraft accident have at least a minimum level of aircraft rescue and firefighting training.

of Addressees: 1 Overall Date Closed: N/A

Addressee:

Aircraft Rescue & Fire Open - Acceptable
Fighting Working Group Response

Date Closed: N/A

Recommendation #: A-14-062 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE CITY OF SAN FRANCISCO: Routinely integrate the use of all San Francisco Fire Department medical and firefighting vehicles in future disaster drills and preparatory exercises.

of Addressees: 1 Overall Date Closed: 04/01/15

State of California, City Closed -

Addressee: Date Closed: 04/01/15

Recommendation #: A-14-063 Overall Status: Closed - Acceptable Action Priority: CLASS II

TO THE CITY OF SAN FRANCISCO: Implement solutions to the communications deficiencies identified in ICF International's

after-action report as soon as practicable.

of Addressees: 1 Overall Date Closed: 04/01/15

Addressee: State of California, City Closed - O4/01/15 Of San Francisco Acceptable Action Date Closed: 04/01/15

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Recommendation Report

Total Number of Recommendations for Recommendation Report: